



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200
Fax 613 632-5246

D4037-3

Job Sheet 196417



Part No: D4037-3

Job Qty: 2 pcs

Part Name: Fwd Crossbeam



Part Weight: 0 lbs

Status: New

Priority: Medium

Job Created: 6/12/19

Job Tracking No:

Due Date: 7/12/19

Created By: Marie Lajeunesse

Type: Stock

Description: Slop

Note: DWG REV E IPP REV:A NEW ISSUE 09-12-14 JLM VERIFIED BY:EC IPP REV:B AS PER REV B 10-04-19
JLM VERIFIED BY:EC IPP REV:D AS PER ECN 11-554 11-05-24 JLM VERIFIED BY:DD IPP REV C:AS PER
ECN 10-563 10-09-28 JLM VERIFIED BY:DD

Ship Via:

Bill of Materials

Job Routing

Op No	Operation	Qty	Start Date	Due Date	Standard		Workcenter/Supplier		Sign-off
					Setup Hrs	Run Hrs	Workcenter / Supplier	Lead Time	
100	Waterjet - Flow - 1 OMAX	2 pcs	7/12/19	7/12/19	0.17	2.11	Waterjet - Flow		DL 19/09/09
110	HAAS 4 Axis - B4B	2 pcs	7/12/19	7/12/19	1.00	5.71	HAAS - 1 - B4B HAAS - 2 - B4B HAAS - 3 - B4B HAAS - 4 - B4B		DL 19/09/09
120	QC 2	2 pcs	7/12/19	7/12/19	0.00	0.00	QC 2 - 1 QC 2 - 12 QC 2 - 14 QC 2 - 17 QC 2 - 19 QC 2 - 2 QC 2 - 20 QC 2 - 22 QC 2 - 23 QC 2 - 25 QC 2 - 32 QC 2 - 33 QC 2 - 35 QC 2 - 39 QC 2 - 4 QC 2 - 40 QC 2 - 44 QC 2 - 45 QC 2 - 48 QC 2 - 49 QC 2 - 50 QC 2 - 51 QC 2 - 52 QC 2 - 57		DL 19/09/09

Plex 6/12/19 3:07 PM Dart.lajeunesse.marie

130 QC 8	2 pcs	7/12/19	0.00 0.00	QC 2 - 62	
				QC 2 - 63	
				QC 2 - 8	
				QC 2 - 66	
				QC 2 - 64	
				QC 2 - 65	
				QC 2 - 5	
				QC 2 - 71	
				QC 2 - 73	
				QC 2 - 69	
				QC 8 - 12	
				QC 8 - 14	
				QC 8 - 17	
				QC 8 - 20	
				QC 8 - 25	
				QC 8 - 3	
				QC 8 - 32	
				QC 8 - 33	
				QC 8 - 35	
				QC 8 - 39	
				QC 8 - 4	
				QC 8 - 44	
				QC 8 - 45	
				QC 8 - 49	
				QC 8 - 58	
				QC 8 - 8	Δ 19-10-05
				QC 8 - 9	
				QC 8 - 68	
				QC 8 - 67	
				QC 8 - 1 (A)	
				QC 8 - 47	
				QC 8 - 40	
				QC 8 - 52	
				QC 8 - 23	
				QC 8 - 57	
140 Handfinish - 1-1 Chemical-B4B	2 pcs	7/12/19	0.00 0.42	Handfinish - 1 - 1 - B4B	
				Handfinish - 1 - 2 - B4B	
				Handfinish - 1 - 3 - B4B	Δ OCT 07 2019
				Handfinish - 1 - 4 - B4B	
				Handfinish - 1 - 5 - B4B	
				Handfinish - 1 - 6 - B4B	
				Handfinish - 1 - 7 - B4B	
				Handfinish - 1 - 8 - B4B	
				Handfinish - 1 - 9 - B4B	
				Handfinish - 1 - 10 - B4B	
				Handfinish - 1 - 11 - B4B	
				Handfinish - 1 - 12 - B4B	
				Handfinish - 1 - 13 - B4B	
				Handfinish - 1 - 14 - B4B	
				Handfinish - 1 - 15 - B4B	
				Handfinish - 1 - 16 - B4B	
				Handfinish - 1 - 17 - B4B	

				Handfinish - 1 - 18 - B4B	
				Handfinish - 1 - 19 - B4B	
				Handfinish - 1 - 20 - B4B	
				Handfinish - 1 - 21 - B4B	
				Handfinish - 1 - 22 - B4B	
150 Powdercoat - 1 White GI(A)- B4B	2 pcs	7/12/19	0.00 0.43	Powdercoat - 1 - B4B	
				Powdercoat - 2 - B4B	
				Powdercoat - 3 - B4B	31 12-10-7
				Powdercoat - 4 - B4B	
160 QC 3	2 pcs	7/12/19	0.00 0.00	QC 3 - 10	
				QC 3 - 13	
				QC 3 - 15	
				QC 3 - 17	
				QC 3 - 18	
				QC 3 - 2	
				QC 3 - 28	
				QC 3 - 3	
				QC 3 - 30	
				QC 3 - 34	
				QC 3 - 36	
				QC 3 - 41	
				QC 3 - 51	
				QC 3 - 58	
				QC 3 - 59	
				QC 3 - 68	
				QC 3 - 9	
				QC 3 - 40	
				QC 3 - 19	
				QC 3 - 43	
				QC 3 - 24	
170 Packaging 3-1 - Stock - B4B	2 pcs	7/12/19	0.00 0.00	Packaging 3 - 1 - B4B	
				Packaging 3 - 2 - B4B	
				Packaging 3 - 3 - B4B	✓ ST 471
				Packaging 3 - 4 - B4B	
				Packaging 3 - 5 - B4B	
				Packaging 3 - 6 - B4B	
				Packaging 3 - 7 - B4B	
				Packaging 3 - 8 - B4B	
				Packaging 3 - 9 - B4B	
				Packaging 3 - 10 - B4B	
				Packaging 3 - 11 - B4B	
				Packaging 3 - 12 - B4B	
				Packaging 3 - 13 - B4B	
				Packaging 3 - 14 - B4B	
				Packaging 3 - 15 - B4B	
				Packaging 3 - 16 - B4B	
				Packaging 3 - 17 - B4B	
				Packaging 3 - 18 - B4B	
				Packaging 3 - 19 - B4B	
				Packaging 3 - 20 - B4B	
				Packaging 3 - 21 - B4B	
				Packaging 3 - 22 - B4B	
				Packaging 3 - 23 - B4B	
				Packaging 3 - 24 - B4B	
				Packaging 3 - 25 - B4B	

			Packaging 3 - 26 - B4B	
			Packaging 3 - 27 - B4B	
			Packaging 3 - 28 - B4B	
			Packaging 3 - 29 - B4B	
			Packaging 3 - 30 - B4B	
			Packaging 3 - 31 - B4B	
			Packaging 3 - 32 - B4B	
			Packaging 3 - 33 - B4B	
			Packaging 3 - 34 - B4B	
			Packaging 3 - 35 - B4B	
			Packaging 3 - 36 - B4B	
180 QC 21 - SA	3 2 pcs	7/12/19	0.00 0.00	QC 21 - SA - 21 ✓ QC 21 - SA - 70 QC 21 - SA - 53
Part Op 100 - Cut blank as per file D4037-3_BLANK Descriptions: 110 - HAAS CNC Vertical Machine) MACHINE AS PER FOLI FA878 AND DWG 120 - (QC2- Inspect parts off machine FAI/FAIB) 130 - (QC8- Inspect parts - second check) 140 - (Chemical Conversion Coat per QSI005 4.1) 150 - (White Gloss(Ref:4.3.5.1) per QSI005 4.3-Alum) 160 - (QC3- Inspect Part Finish) 170 - (Identify as per dwg & Stock Location: _____) 180 - (QC21- Final Inspection - Work Order Release)				ST 471 DAS 21 9-89 OCT 09 2019
Job BOM				
Part / Item	Component Name	Quantity	Operation	Container
M6061T6B1.000X16.000	6061-T6 Bar 1.00 X 16.00	7.8000 ft (3.9 ea)	100-Waterjet - Flow - 1	5191234
Job Allocations				
Operation	Component Part	Required	Inventory	Allocated
100-Waterjet - Flow - 1	M6061T6B1.000X16.000	8	11	0
Part Specifications				
Specifications could not be found.				

Plex 6/12/19 3:07 PM Dart.lajeunesse.marie

DART AEROSPACE LTD		Work Order: 196417
Description: Fwd Crossbeam		Part Number: D4037-3
Inspection Dwg: D4037 Rev: E		Page 1 of 2

FIRST ARTICLE INSPECTION CHECKLIST

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
41.66	+/-0.030	41.650	✓		tape	
0.92	+/-0.030	.918	✓		vernier	
1.75	+/-0.030	1.750	✓		vernier	
0.92	+/-0.030	.918	✓		vernier	
2.125	+/-0.010	2.123	✓		vernier	
Ø0.316	+0.006/-0.001	.316 Ø	✓		pin gauge	
Ø0.391	+0.006/-0.001	.390 Ø	✓		pin gauge	
0.28	+/-0.030	.280	✓		vernier	
R0.19	+/-0.030	R.190 ok!	✓		Gabarit	
0.63	+/-0.030	.625	✓		vernier	
1.50	+/-0.030	1.499	✓		vernier	
1.20	+/-0.030	1.202	✓		vernier	
1.95	+/-0.030	1.948	✓		vernier	
6.00	+/-0.030	6.000	✓		vernier/tape	
10.54	+/-0.030	10.550	✓		tape	
1.38	+/-0.030	1.375	✓		vernier	
1.75	+/-0.030	1.749	✓		vernier	
7.79	+/-0.030	7.790	✓		high gauge	
5.80	+/-0.030	5.80	✓		high gauge	
2.250	+/-0.010	2.248	✓		vernier	
0.875	+/-0.010	.873	✓		vernier	
6.000	+/-0.010	5.998	✓		vernier	
7.75	+/-0.030	7.750	✓		vernier	
1.125	+/-0.010	1.124	✓		vernier	
9.29	+/-0.030	9.275	✓		tape	
5.17	+/-0.030	5.175	✓		vernier	
10.79	+/-0.030	10.792	✓		High gauge	
0.91	+/-0.030	.905	✓		vernier	
0.09 x 45°	+/-0.030 x +/-0.5°	.100 x 45°	✓		vernier	
0.31	+/-0.030					
0.25	+/-0.030	.250	✓		vernier	
0.530	+/-0.010	.522	✓		pin gauge	
0.25	+/-0.030	.250	✓		vernier	
0.550	+/-0.010	.553	✓		high gauge	
3.00	+/-0.030	3.003	✓		vernier	
2.00	+/-0.030	2.011	✓		pipe telescope	
1.00	+/-0.030	1.013	✓		vernier	

DART AEROSPACE LTD		Work Order: 196417
Description: Fwd Crossbeam		Part Number: D4037-3
Inspection Dwg: D4037 Rev: E		Page 2 of 2

FIRST ARTICLE INSPECTION CHECKLIST

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
R0.32	+/-0.030	1.320x	✓		Go/No-Go	
0.200	+/-0.010	.200	✓		Vernier	
0.64	+/-0.030	.660	✓		Vernier	
0.45	+/-0.030	.450	✓		Vernier	
0.70	+/-0.030	.725	✓		Vernier	
0.25	+/-0.030	.250	✓		Vernier	
R0.13	+/-0.030	1.130x	✓		Go/No-Go	
0.49	+/-0.030	.488	✓		Vernier	
0.06	+/-0.030	.050	✓		Vernier	

Measured by: <i>M. 64</i>	Audited by: <i>B.A.</i>	Preliminary Approval:
Date: 2019/09/25	Date: 19-10-06	Date:

Rev	Date	Change	Revised by	Approved
A	10.06.08	New Issue	KJ	
B	10.10.07	Dimensions updated per Dwg Rev C	KJ	
C	11.06.21	Dwg Rev updated	KJ	
D	17.02.16	Dimensions updated per Dwg Rev E	KJ	



Entered: _____ Date: _____

WORK ORDER NON-CONFORMANCE / ROUTE UPDATE

Route update only

NCR No. _____

Job: _____

Part No. _____

DISPOSITION

Rework ☐
Scrap ☐
Use-as-is ☐

DEPARTMENT/PROCESS

Skid-tube ☐
Machining ☐
Large Fab ☐

Cross tube ☐
Small Fab ☐
Finishing ☐

Eng. (Non-AW) ☐
Prod. Eng. Coord. ☐
Rec/Store/Packaging ☐
Engineering ☐
Water Jet ☐
Supplier ☐
Quality ☐

Date: _____ Sequence #: _____

QTY Affected: _____

MRB (QSI042)

Description Work Order Deviation

Disposition

Completed By _____

Lead hand / Supervisor _____

QC / QA Coordinator _____

Root Cause

Operator ☐
Manufacturing Process ☐
Equip/Tooling ☐
Handling/Preservation ☐
Material ☐
Product Improvement ☐
Process Improvement ☐
Human Factors ☐

FAULT CATEGORY

Pressure/Forced ☐
Bending ☐
Crushing ☐
Cracks ☐
Crimp/Kink/Ripple/Wave/Twist ☐
Marks/Chatter ☐
Mislabeled ☐
Contamination ☐
Misaligned/off center ☐
BOM/Route ☐
Broken/Damage/Defect ☐
Incomplete/Unclear Instructions ☐
Drill Holes ☐
Fit/Function ☐

Power Loss/Surge ☐
Folio/Program ☐
Grain Direction ☐
Weld ☐
Wrong Stock Pulled ☐
Out of Sequence ☐
Off-set/Set-up ☐
Positioned Wrong ☐
Outside Tolerance ☐
Drawing ☐
Finish ☐
Part Lost/Missing ☐
Misread ☐

Other/Details: _____